

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for performing bus arbitration, the method comprising:
receiving, by a device driver layer from one of a plurality of applications ~~at least one application~~
included in an application layer, a request to perform a device access operation on one of a plurality of
end devices ~~an end device on a bus~~, the device driver layer including a plurality of device drivers ~~at least~~
~~one device driver~~ that communicate ~~communicates~~ with the plurality of end devices ~~end device~~ utilizing a
[[the]] bus;
each one of the plurality of end devices being connected to the bus;
determining, by the device driver layer, whether the one of the plurality of end devices ~~end device~~
is locked;
responsive to the one of the plurality of end devices ~~end device~~ not being locked, locking, by the
device driver layer, the one of the plurality of end devices ~~end device~~ and performing the device access
operation for the one of the plurality of applications; [[and]]
responsive to the device access operation completing, unlocking the one of the plurality of end
devices; ~~and end device~~.
another one of the plurality of applications performing a second device access operation to access
another one of the plurality of end devices while the device access operation is being performed, wherein
the bus is not locked while the device access operation is being performed and the one of the plurality of
end devices is locked.
2. (Original) The method of claim 1, wherein the device access operation is one of a read operation
and a write operation.
3. (Currently amended) The method of claim 1, further comprising:
responsive to the one of the plurality of end devices ~~end device~~ being locked, denying the device
access operation.

4. (Currently amended) The method of claim 1, wherein the step of determining whether the one of the plurality of end devices ~~end device~~ is locked includes determining whether an address of the one of the plurality of end devices ~~end device~~ is found in a list of occupied ones of the plurality of end devices, wherein the plurality of end devices are separate and distinct end devices.

5. (Currently amended) The method of claim 1, wherein the step of locking the one of the plurality of end devices ~~end device~~ includes placing a device address of the one of the plurality of end devices ~~end device~~ in a list of occupied ones of the plurality of end devices, wherein the plurality of end devices are separate and distinct end devices.

6. (Canceled)

7. (Currently amended) The method of claim 5 ~~[[1]]~~ wherein the step of unlocking the one of the plurality of end devices ~~end device~~ includes removing the device address from the list of occupied ones of the plurality of end devices.

8.-14. (Canceled)

15. (Currently amended) An apparatus for performing bus arbitration, the apparatus comprising:
[[a)] an Inter-Integrated Circuit (IIC) bus;
a plurality end devices attached directly at least one end device ~~connected~~ to the bus;
a plurality of applications at least one application ~~included~~ in an application layer; and
a driver layer that includes a wrapper layer, the driver layer including a plurality of device drivers at least one device driver ~~that communicate~~ ~~communicates~~ with the plurality of end devices at least one end device ~~utilizing~~ the bus,

wherein the wrapper layer receives a request from ~~[[the]]~~ one of the plurality of applications at least one application to perform a device access operation on ~~[[the]]~~ one of the plurality of end devices at least one end device from within the at least one end device on the bus, determines whether the one of the plurality of end devices at least one end device is locked, and, responsive to the one of the plurality of end devices at least one end device not being locked, locks the one of the plurality of end devices at least one end device and performs the device access operation, and wherein, responsive to the device access operation completing, the wrapper layer unlocks the one of the plurality of end devices; and further wherein another one of the plurality of applications performs a second device access operation to access

another one of the plurality of end devices while the device access operation is being performed, wherein the bus is not locked while the device access operation is being performed and the one of the plurality of end devices is locked ~~end device~~.

16. (Currently amended) A computer program product, in a computer readable medium, for performing bus arbitration, the computer program product comprising:

instructions for receiving, by a device driver layer from one of a plurality of applications ~~at least one application~~ included in an application layer, a request to perform a device access operation on one of the plurality of end devices ~~an end device on a bus~~, the device driver layer including a plurality of device drivers ~~at least one device driver~~ that communicate ~~communicates~~ with the plurality of end devices ~~end device~~ utilizing a [[the]] bus;

each one of the plurality of end devices being connected to the bus;

instructions for determining, by the device driver layer, whether the one of the plurality of end devices ~~end device~~ is locked;

instructions, responsive to the one of the plurality of end devices ~~end device~~ not being locked, for locking, by the device driver layer, the one of the plurality of end devices ~~end device~~ and performing the device access operation for the one of the plurality of applications; ~~[[and]]~~

instructions, responsive to the device access operation completing, for unlocking the one of the plurality of end devices; ~~and end device~~.

another one of the plurality of applications performing a second device access operation to access another one of the plurality of end devices while the device access operation is being performed, wherein the bus is not locked while the device access operation is being performed and the one of the plurality of end devices is locked.

17. (Currently amended) The computer program product of claim 16, wherein the instructions for determining whether the one of the plurality of end devices ~~end device~~ is locked include instructions for determining whether an address of the one of the plurality of end devices ~~end device~~ is found in a list of occupied ones of the plurality of end devices, wherein the plurality of end devices are separate and distinct end devices.

18. (Currently amended) The computer program product of claim 16, wherein the instructions for locking the one of the plurality of end devices ~~end device~~ include instructions for placing a device address of the one of the plurality of end devices ~~end device~~ in a list of occupied ones of the plurality of end devices, wherein the plurality of end devices are separate and distinct end devices.

19. (Canceled)
20. (Currently amended) The computer program product of claim 18 [[16]] wherein the instructions for unlocking the one of the plurality of end devices ~~end device~~ include instructions for removing the device address from the list of occupied ones of the plurality of end devices.
21. (Previously presented) The apparatus of claim 15, wherein the device access operation is one of a read operation and a write operation.
22. (Currently amended) The apparatus of claim 15 wherein the wrapper layer, responsive to the one of the plurality of end devices ~~end device~~ being locked, denies the device access operation.
23. (Currently amended) The apparatus of claim 15, wherein the wrapper layer determines whether the one of the plurality of end devices ~~end device~~ is locked by determining whether an address of the one of the plurality of end devices ~~end device~~ is found in a list of occupied ones of the plurality of end devices, wherein the plurality of end devices are separate and distinct end devices.
24. (Currently amended) The apparatus of claim 15, wherein the wrapper layer locks the one of the plurality of end devices ~~end device~~ by placing a device address of the one of the plurality of end devices ~~end device~~ in a list of occupied ones of the plurality of end devices, wherein the plurality of end devices are separate and distinct end devices.
25. (Currently amended) The apparatus of claim 24 [[15]] wherein the wrapper layer unlocks the one of the plurality of end devices ~~end device~~ by removing the device address from the list of occupied ones of the plurality of end devices.
26. (Previously presented) The computer program product of claim 16, wherein the device access operation is one of a read operation and a write operation.
27. (Currently amended) The computer program product of claim 16 further comprising:
instructions for, responsive to the one of the plurality of end devices ~~end device~~ being locked, denying the device access operation.